EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER

2001023773

PUBLICATION DATE

26-01-01

APPLICATION DATE

08-07-99

APPLICATION NUMBER

11194177

APPLICANT: HOKURIKU ELECTRIC IND CO LTD;

INVENTOR: SATO YOSHIO;

INT.CL.

: H05B 33/10 H05B 33/12 H05B 33/14

TITLE

MANUFACTURE OF ORGANIC EL

ELEMENT AND DEVICE THEREFOR

▮▮ アルミ導体パターン 10透明基板 12週明電極 パッファ暦 12 16 36 凸部 第口部32 30マスク ホール輸送材料18

ABSTRACT :

PROBLEM TO BE SOLVED: To provide a method and device for manufacturing an organic EL element such that vapor deposition of an emission layer by use of a mask does not adversely affect other luminous materials, etc.

SOLUTION: A transparent electrode 12 is formed in a predetermined shape from a transparent electrode material, such as ITO(indium tin oxide), on the surface of a transparent substrate 10 of glass or resin, etc., and a luminous layer made from an organic EL material is laminated over the transparent electrode 12 by use of vacuum thin film formation techniques such as vapor deposition. A back electrode 24 made from Al-Li or the like and having a predetermined shape opposite to the transparent electrode 12 is formed on the surface of the luminous layer. To form the luminous layer, a mask 30 having an aperture 32 that opens in the form of the luminous layer is used, and the transparent substrate 10 side face of the mask 30 is formed with projections 36 that abut on the surface of the substrate 10. The projections 36 are located to correspond to non-luminous parts such as aluminum conductor patterns 14 on the substrate 10, and a vapor deposition material is adhered to the substrate 10 through the apertures 32 formed between the projections 36 to form a desired luminous layer.

COPYRIGHT: (C)2001, JPO